# Assignment #6. JavaScript Basics (DOM Manipulation & Events)

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# Group: SE-242 Part 1. Introduction to JavaScript

**Task 0. First Script**

* Create an HTML page and include a JavaScript file.
* Use console.log() to print your name and group.
* Write a script that shows an alert message: *“Hello, JavaScript World!”*.

Изображение выглядит как Шрифт, текст, снимок экрана, Графика

Автоматически созданное описание

# Task 1. Variables & Operators

* Declare variables of different data types (string, number, boolean).
* Perform arithmetic operations and display the results in the console.
* Concatenate strings and print them in the console.

Изображение выглядит как текст, снимок экрана, Шрифт

Автоматически созданное описание

# Part 2. DOM Manipulation Task 2. Changing Content

* Create a paragraph and a button.
* When the button is clicked, change the paragraph text to something new.

# Task 3. Changing Styles

* Create a <div> container.
* Add a button that, when clicked, changes the background color of the block.
* Add another button that changes the font size of the text inside the block.

Изображение выглядит как текст, снимок экрана, Шрифт

Автоматически созданное описание

# Task 4. Creating & Removing Elements

* Create a button **“Add Item”** that adds a new <li> item to a list.
* Create another button **“Remove Item”** that removes the last item from the list.

Изображение выглядит как текст, снимок экрана, Шрифт

Автоматически созданное описание

# Part 3. Events

**Task 5. Mouse Events**

* Create a box that changes color when the mouse is over it (mouseover).
* Restore the original color when the mouse leaves (mouseout).

# Task 6. Keyboard Events

* Create an input field.
* Display the current value of the input in real time (use keyup event).
* Изображение выглядит как текст, снимок экрана, Шрифт

  Автоматически созданное описание

# Task 7. Form Validation (optional)

* Create a simple form with fields: Name, Email, Password.
* Add JavaScript that prevents submission if any field is empty.
* Display an error message below the form if validation fails.

# Изображение выглядит как текст, снимок экрана, программное обеспечение, Шрифт Автоматически созданное описание

# Part 4. Mini Project — Interactive To-Do List Task 8. Build a To-Do App

* Create a text input and an **“Add Task”** button.
* When a task is added, display it in a list with a **“Delete”** button next to it.
* Add functionality to mark tasks as completed (strike- through effect).
* Store tasks temporarily in an array (no need for database/local storage).
* Изображение выглядит как текст, снимок экрана, Шрифт

  Автоматически созданное описание

# Evaluation Criteria (100%):

1. **JavaScript Basics (10%)**

correct use of variables, operators, console output

# DOM Manipulation (10%)

ability to change content, styles, and elements

# Events Handling (10%)

correct use of mouse, keyboard, and form events

# Form Validation (5%)

proper client-side validation using JS

# Mini Project (20%)

working To-Do list with add/delete/complete features

# Design & Code Quality (5%)

neat, readable, well-commented code

1. **Defense during Practice Lesson (30%)** Student explains assignment clearly Demonstrates understanding of assignment Answers instructor’s questions correctly

Completes the given task from the instructor correctly

# Report (10%)

well-structured report with all screenshots and summary